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(54) **Power adapter with fan assembly**

(57) A power converter with a fan assembly cools down a temperature of the power converter. The power converter with a fan assembly includes a housing, a plate, and a second plate. The housing includes a fan assembly (which is integral to the housing) to draw in air. The plate is coupled to the housing to create an air channel be-

between the plate and the housing and the second plate is coupled to the housing to create a second air channel between the second plate and the housing. The fan assembly draws in air through one of the air channel or the second air channel and moves air out through the other of the air channel and the second air channel to cool down the temperature of the power adapter.

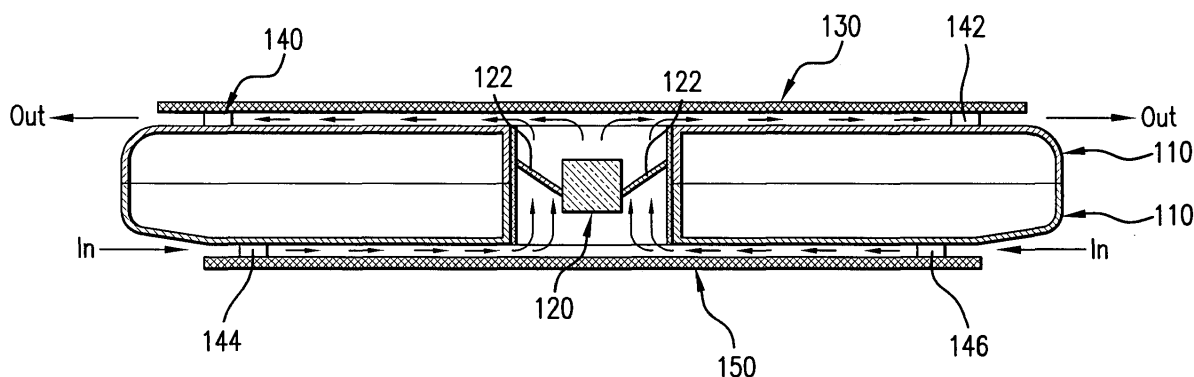


FIG. 1



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 05 25 0640

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	JP 2002 151874 A (FUJI ELECTRIC CO LTD) 24 May 2002 (2002-05-24) * the whole document *	1,7,15, 21,26	INV. H05K7/20
A	JP 04 161069 A (TOKYO SHIBAURA ELECTRIC CO) 4 June 1992 (1992-06-04) * the whole document *	1,7,15, 21,26	
A	JP 11 112159 A (FUJI ELECTRIC CO LTD) 23 April 1999 (1999-04-23) * the whole document *	1,7,15, 21,26	
A	JP 08 263162 A (HITACHI LTD) 11 October 1996 (1996-10-11) * the whole document *	1,7,15, 21,26	
			TECHNICAL FIELDS SEARCHED (IPC)
			H05K
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 30 November 2006	Examiner Castagné, Olivier
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

1  
EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 25 0640

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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30-11-2006

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 2002151874	A	24-05-2002	NONE	
JP 4161069	A	04-06-1992	NONE	
JP 11112159	A	23-04-1999	NONE	
JP 8263162	A	11-10-1996	JP 3663706 B2	22-06-2005